

AMENDMENTS TO THE CLAIMS:

Replace the claims with the following rewritten listing:

1. (Currently Amended) A control system comprising:
 - control means_i and
 - a user interface, said user interface comprising means for • communication of control signals from a user to said control means, said user interface being adaptive.
2. (Currently Amended) A control system according to claim 1, wherein said user interface comprises:
 - motion detection means ~~(MDM)~~_i;
 - output means ~~(OM)~~_i and
 - adaption means ~~(AM)~~ adapted for ○ receipt of motion detection signals ~~(MDS)~~ obtained by said motion detection means ~~(MSM)~~, ○ establishing an interpretation frame on the basis of said motion detection signals ~~(MDS)~~ and ○ establishing and outputting communication signals ~~(CS)~~ to said output means ~~(OM)~~ on the basis of said motion detections signals ~~(MDS)~~ and said interpretation frame.
3. (Currently Amended) A control system according to claim 1 ~~or 2~~, wherein said user interface comprises signal processing means or communicates with motion detection means ~~(MDM)~~ determining the obtained signal differences by comparison with the signals obtained when establishing said interpretation frame.
4. (Currently Amended) A control system according to ~~any of the~~ claims 1-3, wherein said user interface is distributed.
5. (Currently Amended) A control system according to ~~any of the~~ claims 2-4, wherein said motion detection means ~~MDM~~ comprises a set of motion detection sensors ~~(SEN1, SEN2...SENn)~~.

6. (Currently Amended) A control system according to ~~any of the claims 1-5~~, wherein said set of motion detection sensors (~~SEN1, SEN2...SENn~~) are exchangeable.

7. (Currently Amended) A control system according to ~~any of the claims 51-6~~, wherein said set of motion detection sensors (~~SEN1, SEN2...SENn~~) forms a motion detection means (~~MDM~~) combined by at least two motion detection sensors (~~SEN1, SEN2...SENn~~) and wherein an the individual motion detection sensor may be exchanged with another motion detection sensor.

8. (Currently Amended) A control system according to ~~any of the claims 51-7~~, wherein said set of motion detection sensors (~~SEN1, SEN2...SENn~~) comprises at least two different types of motion detection sensors.

9. (Currently Amended) A control system according to ~~any of the claims 21-8~~, wherein said motion detection means (~~MDM~~) may be optimized by a user to an the intended purpose by exchanging or adding motion detection sensors (~~SEN1, SEN2,...SENn~~), preferably by means of said motion detector sensors including at least two different types of motion detection sensors (~~SEN1, SEN2...SENn~~).

10. (Currently Amended) A control system according to ~~any of the claims 81-9~~, wherein said at least two different types of motion detection sensors (~~SEN1, SEN2...SENn~~) are mutually distinguishable.

11. (Currently Amended) A control system according to ~~any of the claims 1-10~~, wherein said user interface comprises remote control means.

12. (Currently Amended) A control system according to ~~any of the claims 51-11~~, wherein said motion detection sensors (~~SEN~~) are driven by rechargeable batteries.

13. (Currently Amended) A control system according to ~~any of the claims 51-12~~, wherein said motion detection means (~~MDM~~) comprises a sensor tray (~~ST~~) for holding said motions detection sensors (~~SEN1, SEN2...SENn~~).

14. (Currently Amended) A control system according to ~~any of the claims 1-13~~, wherein said sensor tray (~~ST~~) comprises means for recharging said motion detection sensors (~~SEN1, SEN2...SENn~~).

15. (Currently Amended) A control system according to ~~any of the claims 21-14~~, wherein said motion detection signals (~~MDS~~) and/or said communication signals are transmitted by ~~means of~~ wireless communication.

16. (Canceled) ~~A control system according to any of the claims 1-15, wherein said communication signals (CS) are transmitted by means of establishing wireless communication.~~

17. (Currently Amended) A control system according to ~~any of the claims 151-16~~, wherein said wireless communication exploits ~~the~~ Bluetooth technology.

18. (Currently Amended) A control system according to ~~any of the claims 151-17~~, wherein said wireless communication exploits wireless network technology.

19. (Currently Amended) A control system according to ~~any of the claims 151-18~~, wherein said wireless communication exploits wireless broadband technology.

20. (Currently Amended) A control system according to ~~any of the claims 151-19~~, wherein said wireless communication exploits UMTS technology.

21. (Currently Amended) A control system according to ~~any of the claims 1-20~~, wherein said control signals represent control commands.

22. (Currently Amended) A control system according to ~~any of the claims 1-21~~, wherein said control signals represent information.

23. (Currently Amended) A control system according to ~~any of the claims 1-22~~, wherein said user interface comprises motion detection means.

24. (Currently Amended) A control system according to ~~any of the claims 1-23~~, wherein said motion detection means ~~is~~are touch-less.

25. (Currently Amended) A control system according to ~~any of the claims 1-24~~, wherein said user interface comprises mapping means.

26. (Currently Amended) A control system according to ~~any of the claims 1-25~~, wherein said user interface comprises calibration means.

27. (Currently Amended) A control system according to ~~any of the claims 1-26~~, wherein said control means comprises means for communicating said signals to at least one output medium.

28. (Currently Amended) A control system according to ~~any of the claims 251-27~~, wherein said mapping means comprises predefined mapping tables.

29. (Currently Amended) A control system according to ~~any of the claims 251-28~~, wherein said mapping means comprises user-defined mapping tables.

30. (Currently Amended) A control system according to ~~any of the claims 251-29~~, wherein said mapping means comprises at least two mapping tables.

31. (Currently Amended) A control system according to ~~any of the claims 251-30~~, wherein said mapping means comprises at least two mapping tables and a common control mapping table.

32. (Currently Amended) A control system according to ~~any of the claims 251-31~~, wherein said mapping means comprises motion learning means.

33. (Currently Amended) A control system according to ~~any of the claims 1-32~~, wherein said motion learning means comprises means for testing and validating new motions.

34. (Currently Amended) A control system according to ~~any of the claims 21-33~~, wherein said motion detection means comprises at least one sensor.

35. (Currently Amended) A control system according to ~~any of the claims 1-34~~, wherein said at least one sensor is an infrared sensor.

36. (Currently Amended) A control system according to ~~any of the claims 341-35~~, wherein said at least one sensor is an optical sensor.

37. (Currently Amended) A control system according to ~~any of the claims 1-36~~, wherein said optical sensor is a CCD-based sensor.

38. (Currently Amended) A control system according to ~~any of the claims 361-37~~, wherein said optical sensor is a digital camera.

39. (Currently Amended) A control system according to ~~any of the claims 361-38~~, wherein said optical sensor is a digital video camera.

40. (Currently Amended) A control system according to ~~any of the claims 361-39~~, wherein said optical sensor is a web camera.

41. (Currently Amended) A control system according to ~~any of the claims 341-40~~, wherein said at least one sensor is an ultrasound sensor.

42. (Currently Amended) A control system according to ~~any of the claims 341-41~~, wherein said at least one sensor is a laser sensor.

43. (Currently Amended) A control system according to ~~any of the claims 341-42~~, wherein said at least one sensor is an electro-magnetic wave sensor.

44. (Currently Amended) A control system according to ~~any of the claims 21-43~~, wherein said motion detection means comprises at least two different kinds of sensors.

45. (Currently Amended) A control system according to ~~any of the claims 1-44~~, wherein said at least two different kinds of sensors are used simultaneously.

46. (Currently Amended) A control system according to ~~any of the claims 441-45~~, wherein said at least two different kinds of sensors have different labels.

47. (Currently Amended) A control system according to ~~any of the claims 441-46~~, wherein said at least two different kinds of sensors have different shapes.

48. (Currently Amended) A control system according to ~~any of the claims 441-47~~, wherein said at least two different kinds of sensors have different sizes.

49. (Currently Amended) A control system according to ~~any of the claims 341-48~~, wherein said at least one sensor is wireless.

50. (Currently Amended) A control system according to ~~any of the claims 341-49~~, wherein said at least one sensor is driven by batteries.

51. (Currently Amended) A control system according to ~~any of the claims 1-50~~, wherein said batteries are rechargeable.

52. (Currently Amended) A control system according to ~~any of the claims 341-51~~, wherein said user interface comprises at least one holder for at least one of said at least one sensor.

53. (Currently Amended) A control system according to ~~any of the claims 1-52~~, wherein said holder comprises means for recharging ~~said~~ batteries.

54. (Currently Amended) A control system according to ~~any of the claims 441-53~~, wherein ~~a~~said holder comprises differently labelled slots for said at least two different kinds of sensors.

55. (Currently Amended) A control system according to ~~any of the claims 1-54~~, wherein said holder comprises differently shaped slots for said at least two different kinds of sensors.

56. (Currently Amended) A control system according to ~~any of the claims 541-55~~, wherein said holder comprises differently sized slots for said at least two different kinds of sensors.

57. (Currently Amended) A control system according to ~~any of the claims 341-56~~, wherein said at least one sensor comprises means for wireless data communication.

58. (Currently Amended) A control system according to ~~any of the claims 1-57~~, wherein said means for wireless communication comprises a network interface.

59. (Currently Amended) A control system according to ~~any of the claims 1-58~~, wherein said network interface comprises protocols of the TCP/IP type.

60. (Currently Amended) A control system according to any of the claims ~~261-59~~, wherein said calibration means comprises means for calibration of a reference position.

61. (Currently Amended) A control system according to ~~any of the claims 1-60~~, wherein said calibration of a reference position is predefined.

62. (Currently Amended) A control system according to ~~any of the claims 601-61~~, wherein said calibration of a reference position is performed automatically.

63. (Currently Amended) A control system according to ~~any of the claims 601-62~~, wherein said calibration of a reference position is performed manually.

64. (Currently Amended) A control system according to ~~any of the claims 601-63~~, wherein said calibration of a reference position is performed for an individual ~~each~~ sensor ~~individually~~.

65. (Currently Amended) A control system according to ~~any of the claims 261-64~~, wherein said calibration means comprises means for calibration of active range

66. (Currently Amended) A control system according to ~~any of the claims 1-65~~, wherein said calibration of ~~an~~the active range is predefined.

67. (Currently Amended) A control system according to ~~any of the claims 651-66~~, wherein said calibration of the active range is performed manually.

68. (Currently Amended) A control system according to ~~any of the claims 651-67~~, wherein said calibration of the active range is performed automatically.

69. (Currently Amended) A control system according to ~~any of the claims 1-68~~, wherein said control system further comprises means for automatic decision of which sensor to use.

70. (Currently Amended) A control system according to ~~any of the claims 341-69~~, wherein said motion detection sensors ~~is~~are permanently positioned on a walls.

71. (Currently Amended) Use of the control system of claim 1-~~70~~ in a rehabilitation system.

72. (Currently Amended) Use of the control system of claim 1-~~70~~ for data analysis system.

73. (Currently Amended) Use of the control system of claim 1-~~70~~ in a remote control system.

74. (Original) Use in a remote control system according to claim 73 for controlling an intelligent room.

75. (Currently Amended) Use of the control system of claim 1-~~70~~ for interactive entertainment.

76. (Original) Use for interactive entertainment according to claim 75, wherein said interactive entertainment comprises virtual reality interactivity.

77. (Currently Amended) Use of the control system of claim 1-~~70~~ for controlling three-dimensional models.

78. (Currently Amended) Use of the control system of claim 1-~~70~~ in learning systems.

79. (Original) Motion detector comprising a set of partial detectors of different types with respect to detection characteristics.

80. (Original) Motion detector according to claim 79, wherein the motion detector is adaptive.

81. (Currently Amended) Motion detector for use in a system according to ~~any of the~~
claims ~~791 to 80~~.